

# Diving in to Sass and Compass

# Matt Cowley

President,  
Yeti Media



<http://yeti-media.com>

Web Manager, WMNF Community Radio



<http://wmnf.org>

# Sass

“Syntactically Awesome Stylesheets”



```
li
  color: #000
  margin: 20px
  a
    color: #acacac
    background-color: #666
    &:hover
      background-color: #333
```

SCSS

# SCSS

“Suicide Chipmunk Spy Squad”

```
li {  
  color: #000;  
  margin: 20px;  
  a {  
    color: #acacac;  
    background-color: #666;  
    &:hover {  
      background-color: #333;  
    }  
  }  
}
```



Why SASS?

# Why SASS?

- Speed
- Power
- Flexibility
- Maintainability

# Compass

- Framework for sass/scss
- Compiles sass/scss to css
- Ruby-based
- But - not limited to ruby projects

# Why SASS?

Because a little css is nice...

```
h1 { font-size: 120%;}  
  
.hint {  
  font-style: italic;  
  color: #acacac;  
}
```

# Why SASS?

But a lot of css is a lot....

```
1
2 /* ++++++ BASIC ++++++ */
3 body {
4     background: #fff;
5     margin: 3px 0 0 0;
6     padding: 0;
7     /*font-family: Geneva, Arial, Helvetica, sans-serif;*/
8     font-size: 1.0em;
9     color: #4f5656;
0 }
1 form, input { margin: 0; padding: 0; }
2 img { border: none; }
3
4 div.float-left { float: left; width: 48%; }
5 div.float-right { float: right; width: 48%; }
6
7 .clear { clear: both; }
8
9 .margin-top { margin-top: 15px; }
0
1 p + p {
2     margin-top: 1.1em;
3     text-indent: 0;
4 }
5
6 /* ++++++ LEFT COLUMN ++++++ */
7 div#left-col {
8     /*width: 214px; span-7 */
9 }
0 ul#side-nav {
1     margin: 0 0 10px 0;
2     padding: 0;
3     list-style-type: none;
4 }
5 ul#side-nav li {
6     background: #eaeeee;
7     margin-bottom: 1px;
8 }
9 ul#side-nav li a:link, ul#side-nav li a:visited, ul#side-nav li a:hover, ul#side-nav li a:active {
0     font-size: .8em;
1     color: #5d6161;
2     font-weight: bold;
3     display: block;
4     text-decoration: none;
```

```
995 ins.diffmod, ins.diffins { background: #d4fdd5; text-dec
996 del.diffmod, del.diffdel { color: #ff9999; }
997
998 span.sponsored_text {
999     /*width: 100%;*/
1000     font-size: 70%;
1001     margin-left: 5px;
1002 }
1003 .ad {
1004     margin-top: 40px;
1005 }
1006
1007 #home_banner_admin_list li {
1008     list-style-type: decimal;
1009 }
1010
1011 #listen_again {
1012     border: 1px solid #999;
1013     background: #ffffcc;
1014     padding: 4px;
1015     margin-bottom: 20px;
1016 }
1017 #listen_again .info {
1018     font-size: 1em;
1019 }
1020 #listen_again li {
1021     margin-bottom: 5px;
1022 }
1023
```



# Getting Started

# CSS is valid SCSS

- install compass
- open `screen.scss`
- paste in your css

Thanks!

# Cool things about SASS

- Variables
- Inheritance
- Mixins
- Nesting
- plugins and functions

A few examples

# Nesting

From this:

```
ul#main-nav {
  background: url(../images/backg_topnav.gif) left no-repeat;
  margin: 0;
  padding: 0;
  list-style-type: none;
  height: 27px;
}
ul#main-nav li {
  float: left;
  line-height: 1.7em;
}
ul#main-nav li a:link, ul#main-nav li a:visited, ul#main-nav li a:hover, ul#main-nav li a:active {
  color: #303434;
  text-decoration: none;
  font-weight: bold;
  display: block;
  font-size: .9em;
}
ul#main-nav li a:link#home, ul#main-nav li a:visited#home, ul#main-nav li a:hover#home, ul#main-nav li a:active#home {
  padding-left: 13px;
}
ul#main-nav li a:link#news, ul#main-nav li a:visited#news, ul#main-nav li a:hover#news, ul#main-nav li a:active#news {
  padding-left: 38px;
}
ul#main-nav li a:link#music, ul#main-nav li a:visited#music, ul#main-nav li a:hover#music, ul#main-nav li a:active#music {
  padding-left: 40px;
}
}
```

# Nesting

To this:

```
ul#main-nav {
  background: url(../images/backg_topnav.gif) left no-repeat;
  margin: 0;
  padding: 0;
  list-style-type: none;
  height: 27px;
  li {
    float: left;
    line-height: 1.7em;
    a:link, a:visited, a:hover, a:active {
      color: #303434;
      text-decoration: none;
      font-weight: bold;
      display: block;
      font-size: .9em;
    }
    a:link#home, a:visited#home, a:hover#home, a:active#home {
      padding-left: 13px;
    }
    a:link#news, a:visited#news, a:hover#news, a:active#news {
      padding-left: 38px;
    }
    a:link#music, a:visited#music, a:hover#music, a:active#music {
      padding-left: 40px;
    }
    a:link#arts, a:visited#arts, a:hover#arts, a:active#arts {
      padding-left: 40px;
    }
    a:link#pledge, a:visited#pledge, a:hover#pledge, a:active#pledge {
```

# Nesting => scopes

```
<html>  
  
<body class="<%= controller.controller_name %>">  
  
    ....  
  
</body>  
  
</html>
```

# Nesting => scopes

```
body {  
  background-color: $main-background-color;  
  margin: 40px;  
  p {  
    background-color: $main-content-background-color;  
  }  
}
```

```
body.books {  
  p {  
    background-color: $books-background;  
  }  
}
```

```
body.music {  
  p {  
    background-color: $music-background;  
  }  
}
```

# Variables

From this:

```
#home {  
  background-color: #E0401C;  
  color: #E5B051;  
}  
  
#home h1 {  
  color: #272F30;  
}  
  
#home h3 {  
  color: #9E2B20;  
}  
  
#about {  
  background-color: #F7EDB7;  
  color: #E5B051;  
}  
  
#about h1 {  
  color: #272F30;  
}  
  
#about h3 {  
  color: #9E2B20;  
}
```

# Variables

To this:

```
$background-color: #E0401C;
$font-color: #E5B051;
$header-color: #272F30;
$sub-header-color: #9E2B20;
$salt-background-color: #F7EDB7;

#home {
  background-color: $background-color;
  color: $font-color;
}

#home h1 {
  color: $header-color;
}

#home h3 {
  color: $sub-header-color;
}

#about {
  background-color: $salt-background-color;
  color: $font-color;
}

#about h1 {
  color: $header-color;
}

#about h3 {
  color: $sub-header-color;
}
```

# Mixins

From this:

```
.section p {
  -moz-box-shadow: 1px 3px 7px gray;
  -webkit-box-shadow: 1px 3px 7px gray;
  box-shadow: 1px 3px 7px gray;
  /* For IE 8 */
  -ms-filter: "progid:DXImageTransform.Microsoft.Shadow(Strength=3, Direction=135, Color='#5d5d5d')";
  /* For IE 5.5 - 7 */
  filter: progid:DXImageTransform.Microsoft.Shadow(Strength=3, Direction=135, Color='#5d5d5d');
  background-color: #acacac;
  margin: 20px;
}

.footer p {
  -moz-box-shadow: 1px 3px 7px gray;
  -webkit-box-shadow: 1px 3px 7px gray;
  box-shadow: 1px 3px 7px gray;
  /* For IE 8 */
  -ms-filter: "progid:DXImageTransform.Microsoft.Shadow(Strength=3, Direction=135, Color='#5d5d5d')";
  /* For IE 5.5 - 7 */
  filter: progid:DXImageTransform.Microsoft.Shadow(Strength=3, Direction=135, Color='#5d5d5d');
  margin: 10px;
  background-color: #eeeeee;
}
```

# Mixins

To this:

```
@mixin shadow {
  -moz-box-shadow: 1px 3px 7px gray;
  -webkit-box-shadow: 1px 3px 7px gray;
  box-shadow: 1px 3px 7px gray;
  /* For IE 8 */
  -ms-filter: "progid:DXImageTransform.Microsoft.Shadow(Strength=3, Direction=135, Color='#5d5d5d')";
  /* For IE 5.5 - 7 */
  filter: progid:DXImageTransform.Microsoft.Shadow(Strength=3, Direction=135, Color='#5d5d5d');
}

.section p {
  @include shadow;
  background-color: #acacac;
  margin: 20px;
}

.footer p {
  @include shadow;
  margin: 10px;
  background-color: #eeeeee;
}
```

# Mixins - grid!

From this:

```
<div id="content" class="container">

  <section id="header" class="grid-24">
    <h1>Big Header stuff</h1>
    <p> blh bah</p>
  </section>

  <div id="main_wrapper" class="grid-24">

    <p class="grid-8 sales_matter" id="features">
      lorem ipsum etc
    </p>

    <p class="grid-8 sales_matter" id="pricing">
      lorem ipsum etc
    </p>

    <p class="grid-8 sales_matter" id="pitch">
      lorem ipsum etc
    </p>
  </div>

</div>
<div id="footer" class="footer grid-24">
  footer stuff
</div>
```

# Mixins - grid!

To this:

```
#content { @include container;}

#header {
  @include grid(24);
}

#main_wrapper {
  @include grid(24);

  .sales_matter {
    @include grid(8);
  }
  #pitch {
    @include grid(8, last);
  }
}

#footer {
  @include grid(24);
}
```

```
<div id="content">

  <section id="header">
    <h1>Big Header stuff</h1>
    <p> blh bah</p>
  </section>

  <div id="main_wrapper">

    <p class="sales_matter" id="features">
      lorem ipsum etc
    </p>

    <p class="sales_matter" id="pricing">
      lorem ipsum etc
    </p>

    <p class="sales_matter" id="pitch">
      lorem ipsum etc
    </p>
  </div>

</div>
<div id="footer" class="footer">
  footer stuff
</div>
```

# Combine Mixins

```
@mixin round {
  @include border-radius($radius);
}

@mixin site-list-header-gradient ( $background-start: #646565 , $background-end: #3D3D3E ) {
  background-image: -moz-linear-gradient(
    top, $background-start, $background-end
  );
  background-image: -webkit-gradient(
    linear, left top, left bottom,
    color-stop(0, $background-start),
    color-stop(1, $background-end)
  );
  background-image: linear-gradient(
    top, $background-start, $background-end
  );
}

@mixin shadow {
  -moz-box-shadow: 1px 3px 7px gray;
  -webkit-box-shadow: 1px 3px 7px gray;
  box-shadow: 1px 3px 7px gray;
  /* For IE 8 */
  -ms-filter: "progid:DXImageTransform.Microsoft.Shadow(Strength=3, Direction=135, Color='#5d5d5d')";
  /* For IE 5.5 - 7 */
  filter: progid:DXImageTransform.Microsoft.Shadow(Strength=3, Direction=135, Color='#5d5d5d');
}

@mixin box {
  @include shadow;
  @include round;
  @include site-list-header-gradient;
}

p.box {
  @include box;
}
```

# Functions

```
$font-color: $E5B051;
$text-background: #272F30;

a {
  color: $font-color;
  background-color: $text-background;

  &:hover {
    color: darken($font-color, 20%);
    background-color: transparentize( lighten($text-background, 20%), .4);
  }
}
```

# More functions

`lighten($color, $amount)`  
Makes a color lighter.

`darken($color, $amount)`  
Makes a color darker.

`saturate($color, $amount)`  
Makes a color more saturated.

`desaturate($color, $amount)`  
Makes a color less saturated.

`grayscale($color)`  
Converts a color to grayscale.

`complement($color)`  
Returns the complement of a color.

`invert($color)`  
Returns the inverse of a color.

## Opacity Functions

---

`alpha($color) / opacity($color)`  
Gets the alpha component (opacity) of a color.

`rgba($color, $alpha)`  
Add or change an alpha layer for any color value.

`opacify($color, $amount) / fade-in($color, $amount)`  
Makes a color more opaque.

`transparentize($color, $amount) / fade-out($color, $amount)`  
Makes a color more transparent.

# More functions

## RGB Functions

---

`rgb($red, $green, $blue)`

Converts an `rgb(red, green, blue)` triplet into a color.

`rgba($red, $green, $blue, $alpha)`

Converts an `rgba(red, green, blue, alpha)` quadruplet into a color.

`rgba($color, $alpha)`

Adds an alpha layer to any color value.

`red($color)`

Gets the red component of a color.

`green($color)`

Gets the green component of a color.

`blue($color)`

Gets the blue component of a color.

`mix($color-1, $color-2, [$weight])`

Mixes two colors together.

# Partials = code clarity

```
// Setup style constants
@import "partials/base";

// Basic reset stuff
@import "compass/reset";

// Some CSS3 stuff and utilities
@import "compass/css3";
@import "compass/utilities";

// Misc partials
@import "partials/ajax";
@import "partials/mixin";
@import "partials/forms";
@import "partials/dialog";
@import "partials/affiliate-store";

//jQuery Scrolling
@import "partials/scrollable-navigator";
@import "partials/scrollable-buttons";

/* Getting the new tags to behave */
article, aside, audio, canvas, command, datalist, c
  display: block; }
```

# Plugins etc

- Grid systems
- HTML5 Boilerplate
- Common toolsets

# Resources

- <http://compass-style.org>
- <http://sass-lang.com>
- Sass facebook group
- <https://github.com/thoughtbot/bourbon>
- <http://chriseppestein.github.com/sass-recipes/>

# Thanks!

- Matt Cowley
- madcowley - skype, twitter, gmail
- <http://www.madcowley.com/madcode/>